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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/658,594	09/08/2000	Shinya Matsumoto	CS-20-000908	2609

22712 7590 11/20/2002

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EXAMINER

CHUNG, DANIEL J

ART UNIT	PAPER NUMBER
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2672

DATE MAILED: 11/20/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

A

## Office Action Summary

Application No.

09/658,594

Applicant(s)

MATSUMOTO ET AL.

Examiner

Daniel J Chung

Art Unit

2672

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

### Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

## **DETAILED ACTION**

### ***Priority***

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

### ***Drawings***

The drawings are not objected to by the Examiner.

### ***Specification***

Please review the application and correct all informalities.

The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

*Claims 1,6-7,12-13 and 18-20 are rejected under 35 U.S.C. 102(b) as being anticipated by Rice (5,325,480).*

Regarding claim 1, Rice discloses that the claimed feature of a method of rendering an image, comprising the step of: moving a texture simulatively on at least one object thereby to render an image. (See Abstract, col 1 line 13-26, col 1 line 33-55, col 2 line 3-6)

Regarding claim 6, Rice discloses that the claimed feature of a method of processing an image, comprising the steps of: storing ["texture memory"] a texture image in a texture rendering area of an image memory; storing ["random access memory"; 72] a polygon in a display rendering area of image memory based on at least texture image, and mapping the texture image onto polygon; moving the texture image stored in texture rendering area in an arbitrary direction and restoring the moved texture image in texture rendering area; and mapping [76] the moved texture image onto the polygon stored in display rendering area. (See Abstract, Fig 8, col 1 line 13-26, col 1 line 33-55, col 2 line 3-6)

Regarding claims 7,12-13 and 18-20, claims 7,12-13 and 18-20 are similar in scope to the claims 1 and 6, and thus the rejections to claims 1 and 6 hereinabove are also applicable to claims 7,12-13 and 18-20.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

*Claims 2,4,8,10,14 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rice in view of Nomi et al (6,030,289).*

Regarding claim 2, Rice does not explicitly disclose "semitransparent textures" in simulating fluid effects. However, Nomi et al discloses that "semitransparent texture data may be prepared for being mapped onto the polygon model of the water surface". (See col 7 line 13-16) It would have been obvious to one skilled in the art to incorporate "semitransparent textures" of Nomi et al into the teaching of Rice (both are computer image simulating system), in order to render highly realistic computer generated image for overlaying images in computer generated scene (i.e. underwater images), as such improvement (using semitransparent textures) is also advantageously desirable in the teaching of Rice for "producing a complete coverage of the image" (i.e. underwater image with water ripples). (See col 5 line 18-23 in Rice)

Regarding claims 4,8,10,14 and 16, claims 4,8,10,14 and 16 are similar in scope to the claim 2, and thus the rejection to claim 2 hereinabove is also applicable to claims 4,8,10,14 and 16.

*Claims 3,5,9,11,15 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rice in view of Nomi et al, and further in view of Blinn (6,184,891).*

Regarding claim 3, the combination of Rice and Nomi does not specifically disclose that the step of arranging semitransparent or transparent object in one or multiple layers. However, such limitation is shown in the teaching of Blinn. (See Abstract, Fig 2, Fig 4, Fig 5, Fig 6) It would have obvious to one having ordinary skill in the art at the time of Applicant's invention to combine the teachings of Rice, Nomi and Blinn, because they all relate to simulate the computer generated images, and the teaching/suggestion in Blinn (col 4 line 12-29) regarding of "obtain the correct result when a partially transparent object is in front of a background object" for accurate fog simulation, provide the motivation to employ the method for arranging object in one or multiple layers into the teaching of Rice, in order to provide enhanced way of simulating the computer-generated image on transparent portions.

Regarding claims 3,5,9,11,15 and 17, claims 3,5,9,11,15 and 17 are similar in scope to the claim 3, and thus the rejection to claim 3 hereinabove is also applicable to claims 3,5,9,11,15 and 17.

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniel J. Chung whose telephone number is (703) 306-3419. He can normally be reached Monday-Thursday and alternate Fridays from 7:30am- 5:00pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael, Razavi, can be reached at (703) 305-4713.

**Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks  
Washington, D.C. 20231

**or faxed to:**

**(703) 872-9314 (for Technology Center 2600 only)**


Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

djc  
November 11, 2002



**MICHAEL RAZAVI**  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2600